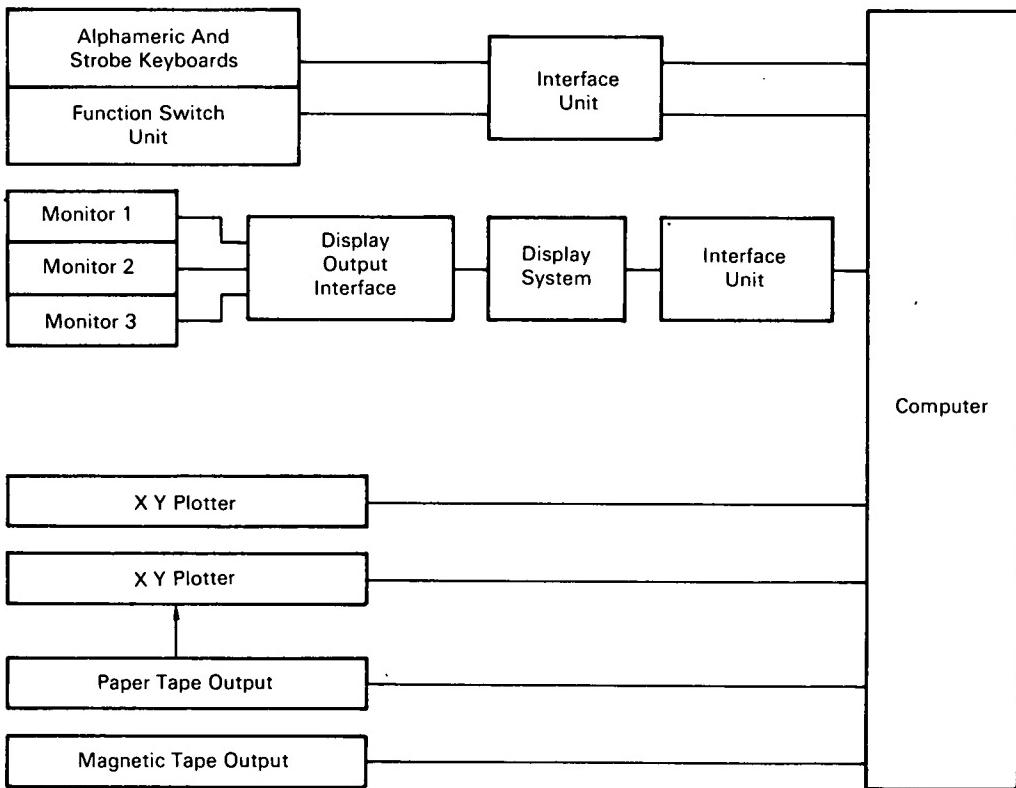


# NASA TECH BRIEF



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## Hydra I Data Display System



A system has been devised to generate charts, graphs, printed matter, etc. on slides or conventional negatives and positives, and combines these media with a capability of storage on magnetic tape for future updating to accommodate engineering changes or contract modifications to be readily added to basic data. The system has been named Hydra due to its self-generating feature reminiscent of the monster of Greek mythology.

The system operator develops displays on a video monitor screen, using an alphabetic keyboard and a set of cursor (strobe) controls as input devices. Once a display is developed, it may be stored on magnetic tape and recalled at will for updating, review, or printout. Printout may be by either a teleprinter or X-Y plotter.

The system consists of four groups, input and control equipment, computer, display output, and copy

(continued overleaf)

output. Input and control equipment includes alphanumeric and strobe control units and function switch unit. Characters, numerals, and symbols may be entered on the display monitor in either a typewriter mode (for straight copy work) or in a random mode (as in labeling pictorial displays). The strobes are used to position characters in the random mode and to draw lines by means of coordinates supplied by the 3 monitors. All information is routed to the computer, which processes it and transfers it to the display system. Following display, the data is again routed to the computer where it is transferred to either paper tape or magnetic tape or both.

**Note:**

Inquiries concerning this innovation may be directed to:

Technology Utilization Officer  
Manned Spacecraft Center  
Houston, Texas 77058  
Reference: B68-10155

**Patent status:**

No patent action is contemplated by NASA.

Source: Robert L. Hodgkins and Don R. Osgood  
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